FORM PTO-1449 U.S. Department of Commerce Attorney Docket No.: SHIMIZU-13116 Serial No.: 10/591,490 (Modified) Patent and Trademark Office Applicant: Takashi Kadowaki INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use Several Sheets If Necessary) Filing or 371(c) Date: 09/01/2006 Group Art Unit: (37 CFR § 1.98(b)) U.S. PATENT DOCUMENTS Examiner Cite Document / Publication / Subclass Class Filing Date Applicant / Patentee Patent Number Initials No. Issue Date 2004/0241802 Kadowaki et al. FOREIGN PATENTS OR PUBLISHED FOREIGN PATENT APPLICATIONS Translation Document **Publication Date** Country / Patent Office Class Subclass Number Yes No 2 WO 2004/061108 **PCT** OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication) 3 Berg et al., "The adipocyte-secreted protein Acrp30 enhances hepatic insulin action," Nature Medicine, 7:947-953 (2001) Biggs III et al., "Protein kinase B/Akt-mediated phosphorylation promotes nuclear exclusion of the winged helix transcription factor FKHR1," 4 Proc Natl Acad Sci USA, 96:7421-7426 (1999) 5 Brunet et al., "Akt promotes cell survival by phosphorylating and inhibiting a forkhead transcription factor," Cell, 96:857-868 (1999) Friedman et al., "Phosphoenolpyruvate carboxykinase (GTP) gene transcription and hyperglycemia are regulated by glucocorticoids in 6 genetically obese db/db transgenic mice," J Biol Chem, 272:31475-31481 (1997) Fruebis et al., "Proteolytic cleavage product of 30-kDa adipocyte complement-related protein increases fatty acid oxidation in muscle and causes 7 weight loss in mice," Proc Natl Acad Sci USA, 98:2005-2010 (2001) Guo et al., "Phosphorylation of serine 256 by protein kinase B disrupts transactivation by FKHR and mediates effects of insulin on insulin-like ጸ growth factor-binding protein-1 promoter activity through a conserved insulin response sequence," J Biol Chem, 274:17184-17192 (1999) 9 Herzig et al., "CREB regulates hepatic gluconeogenesis through the coactivator PGC-1," Nature, 413:179-183 (2001) 10 Hu et al., "AdipoQ is a novel adipose-specific gene dysregulated in obesity," J Biol Chem, 271:10697-10703 (1996) 11 Kadowaki, "Insights into insulin resistance and type 2 diabetes from knockout mouse models," J Clin Invest, 106:459-465 (2000) 12 Kubota et al., "Disruption of adiponectin causes insulin resistance and neointimal formation," J Biol Chem, 277:25863-25866 (2002) 13 Levine et al., "Toxicologic evaluation of streptozotocin (NSC 85998) in mice, dogs and monkeys," Drug Chem Toxicol, 3:201-212 (1980) Maeda et al., "cDNA cloning and expression of a novel adipose specific collagen-like factor, apM1 (Adipose Most Abundant Gene Transcript 1), 14 Biochem Biophys Res Commun, 221:286-289 (1996) 15 Maeda et al., "Diet-induced insulin resistance in mice lacking adiponectin/ACRP30," Nature Medicine, 8:731-737 (2002) Nakae et al., "Insulin stimulates phosphorylation of the forkhead transcription factor FKHR on serine 253 through a wortmannin-sensitive 16 pathway," J Biol Chem, 274:15982-15985 (1999) Nakae et al., "The forkhead transcription factor Foxo1 (Fkhr) confers insulin sensitivity onto glucose-6-phosphatase expression," J Clin Invest, 17 108:1359-1367 (2001) Nakano et al., "Isolation and characterization of GBP28, a novel gelatin-binding protein purified from human plasma," J Biochem, 120:803-812 18 Ouchi et al., "Adipocyte-derived plasma protein, adiponectin, suppresses lipid accumulation and class A scavenger receptor expression in human 19 monocyte-derived macrophages," Circulation, 103:1057-1063 (2001) 20 Rakieten et al., "Studies on the diabetogenic action of streptozotocin (NSC-37917)," Cancer Chemother Rep, 29:91-98 (1963) Scheer et al., "Constitutively active mutants of the alB-adrenergic receptor: role of highly conserved polar amino acids in receptor action," 21 EMBO J, 15:3566-3578 (1996) 22 Scherer et al., "A novel serum protein similar to Clq, produced exclusively in adipocytes," J Biol Chem, 270:26746-26749 (1995) 23 Seglen, "Preparation of isolated rat liver cells," Methods Cell Biol, 13:29-83 (1976) 24 Shepherd et al., "Phosphoinositide 3-kinase: the key switch mechanism in insulin signaling," Biochem J, 333:471-490 (1998)

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Examiner:

96:11836-11841 (1999)

Takaishi et al., "Regulation of nuclear translocation of Forkhead transcription factor AFX by protein kinase B," Proc Natl Acad Sci USA,

Date Considered:

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use Several Sheets If Necessary) (37 CFR § 1.98(b))		Filing or 371(c) Date: 09/01/2006	Group Art Unit:
OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)			
26	Tomas et al., "Enhanced muscle fat oxidation and glucose transport by ACRP30 globular domain: Acetyl-CoA carboxylase inhibition and AMP-activated protein kinase activation," Proc Natl Acad Sci USA, 99:16309-16313 (2002)		
27	Tsuchida et al., "Insulin/Foxo1 pathway regulates expression levels of adiponectin receptors and adiponectin sensitivity," J Biol Chem, 279:30817-30822 (2004)		
28	Virkamaki et al., "Protein-protein interaction in insulin signaling and the molecular mechanisms of insulin resistance," J Clin Invest, 103:931-943 (1999)		
29	Wess, "G-protein-coupled receptors: Molecular mechanisms involved in receptor activation and selectivity of G-protein recognition," FASEB J, 11:346-354 (1997)		
30	Yamauchi et al., "The fat-derived hormone adiponectin reverses insulin resistance associated with both lipoatrophy and obesity," Nature Medicine, 7:941-946 (2001)		
31	Yamauchi et al., "Inhibition of RXR and PPARy ameliorates diet-induced obesity and type 2 diabetes," J Clin Invest, 108:1001-1013 (2001)		
32	Yamauchi et al., "Adiponectin stimulates glucose utilization and fatty-acid oxidation by activating AMP-activated protein kinase," Nature Medicine, 8:1288-1295 (2002)		
33	Yamauchi et al., "Globular adiponectin protected ob/ob mice from diabetes and ApoE-deficient mice from atherosclerosis," J Biol Chem, 278:2461-2468 (2003)		
34	Yamauchi et al., "Cloning of adiponectin receptors that mediate antidiabetic metabolic effects," Nature, 423:762-769 (2003)		
35	Yokomizo et al., "A G-protein-coupled receptor for leukotriene	B ₄ that mediates chemotaxis," Nature, 387:6	20-624 (1997)
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